A marketing research study on the christmas tree market of St. John's and surrounding areas

Jill E. Winsor

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A MARKETING RESEARCH STUDY ON THE CHRISTMAS TREE MARKET OF ST. JOHN'S AND SURROUNDING AREAS

by Jill E. Winsor

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ABSTRACT

A telephone survey of households in St. John's and surrounding areas was conducted to determine whether demand for natural Christmas trees supported the establishment of cultivated Christmas tree farms in Newfoundland. Results indicated strong demand for natural Christmas trees. Fifty-seven percent of the survey population used natural Christmas trees in 1989 while 33 percent displayed artificial trees. Approximately 76 percent of respondents said they would purchase locally grown cultivated Christmas trees if available at competitive prices. The recommended price for cultivated trees should not exceed $40, and average $15-20 per tree. Consumers preferred medium density trees with an average height of 7 feet (2.13 m).

RÉSUMÉ

Pour déterminer si la demande d'arbres de Noël naturels justifie l'établissement de pépinières d'arbres de Noël à Terre-Neuve, on a mené une enquète par téléphone auprès des ménages de St. John's et des environs. Les résultats indiquent une forte préférence pour les arbres de Noël naturels. En 1989, 57% des personnes interrogées ont employé des arbres naturels, et 33% des arbres artificiels. Près de 76% des répondants se sont dits prèts à acheter des arbres de Noël cultivés localement s'ils sont offerts à prix concurrentiel. On suggère que le prix d'un arbre devrait être de 15$ à 20$ en moyenne, et ne pas dépasser 40$. Les consommateurs ont dit préfére un arbre modérément fourni, d'une hauteur moyenne de 2, 13 m (7 pieds).

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EXECUTIVE SUMMARY

The findings of this report indicate strong evidence for the establishment of cultivated Christmas tree farms in Newfoundland. The survey population included Christmas tree users in St. John's and surrounding areas. Telephone interviews were conducted to obtain 403 completed questionnaires with a response rate of 76 percent.

Approximately 57 percent of the survey population used natural Christmas trees last Christmas, most of which were purchased about 5 days before Christmas from commercial vendors. There was an overwhelming preference for spruce and fir species, and an average height of 7 feet. Most natural Christmas tree households paid between $10 and $25 for their trees last year. It is recommended that the price of cultivated Christmas trees not exceed $40 for large trees, and average $15-20 per tree.

About 33 percent used artificial Christmas trees. Although this market was smaller than the natural tree market, evidence from other provincial time series studies indicate a trend of increasing demand for artificial trees. However, a small percentage of the artificial tree market in the survey area are not totally loyal to the use of artificial Christmas trees. With proper promotional and marketing strategies, segments of this market are attainable.

Results indicate that current purchasing patterns of ALL Christmas tree users will remain consistent. Demand for cultivated Christmas trees is high as 76 percent of respondents said they would purchase cultivated trees at competitive prices. The target market for cultivated Christmas was determined as young families (25-44 years) with children. This segment has total family income greater than $30,000, and resides in single detached dwellings. However, in order to capture this market, aggressive promotional and marketing strategies must be implemented.

A Marketing Research Study on the Christmas Tree Market of St. John's and Surrounding Areas

by

Jill E. Winsor

1.0 INTRODUCTION

Traditionally, Newfoundlanders have obtained Christmas trees in three ways: (1) artificial trees, purchased by individuals;(2) natural trees, purchased from independent cutters; and (3) natural trees, cut by individuals. Newfoundland is the only Canadian province not actively engaged in cultivated Christmas tree production, and one of the few provinces that allows residents with Provincial cutting permits to cut trees from local forests. To date, only limited studies have been conducted on the provincial Christmas tree market. Consequently, little is known about consumers who purchase Christmas trees, natural or artificial, compared to those who cut their own trees.

The objectives of this report are to explore characteristics of the current Christmas tree market in St. John's and surrounding areas, and provide information on the feasibility of establishing cultivated Christmas tree farms in the province.

The organization of this report is as follows. The methodology of the survey population and data collection techniques are outlined in the second section. Section three presents limitations imposed on the study. The fourth section contains the results, as based on Christmas tree usage last Christmas. Conclusions are presented in Section five, and recommendations are offered in Section six.

2.0 METHODOLOGY

2.1 General Approach

Data for the project were collected through telephone interviews using a

questionnaire (Appendix A). This method of collection was chosen to minimize non-sampling error and ensure accurate and consistent data. Interviews were conducted by students employed by Forestry Canada for the duration of the interview process. Each student was informed about project objectives, trained in telephone interviewing techniques, and monitored throughout the survey process for quality control.

2.2 Survey and Sample Populations[1]

The survey population encompassed residential households in the following municipalities: (1) St. John's; (2) Mount Pearl; (3) Paradise; (4) and Wedgewood Park. These areas were defined using telephone exchanges (Appendix B).

The Christmas tree market of the survey population was studied through a **sample survey**, involving enumeration of only part of the population (Singh and Chaudhary 1986). Due to budgetary and time constraints, however, research was only conducted on households in St. John's and surrounding areas. The sample population is not fully representative of the entire provincial population, in particular, rural areas of the province. However, the urban market is the best indicator of demand for cultivated Christmas trees since the forest is not as accessible, the consumer market is larger, disposable income is presumably greater, and there is considerable variance between rural and urban lifestyles (e.g. use of convenience items, size of city or town, and the availability of services). Therefore, the larger urban market in and around St. John's was selected as the sampling frame.

Applying this frame to the survey population, a sample population of residential households was determined. In 1986, the total number of private

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1 The survey population was defined as those individuals who actually purchased or cut Christmas trees for their own use during the 1989 holiday season.

households in St. John's and surrounding areas was 36,875 (Statistics Canada 1986)[2]. The sample population was NOT broken down into more than one region; therefore, one sample of 400 households was used to satisfy the objectives, time and budgetary constraints of the project. Using this sample size, one can be 95 percent confident that results will fall within +/- 5 percent of the actual population.

2.3 Questionnaire Design and Telephone Call Procedures

The questionnaire was designed to obtain data required to assess the feasibility of establishing cultivated Christmas tree farms. The questionnaire was pretested to ensure that each question was comprehensible and properly phrased. During the pretest, the probability of successfully completing the survey, given the subject matter and the time-of-year (i.e. summer), was evaluated. After further revisions and modifications, data were collected.

A sampling frame was derived using a computer-generated program of the Eastern Newfoundland Telephone Directory. Computer software, LOTUS, generated random numbers to represent pages, columns, and rows. The following steps were taken to arrive at a set of randomly-generated numbers for use in the survey: (1) page numbers were generated using parameters of 1 to 246 (that is, the range of pages in the St. John's exchange); (2) numbers between one and four were produced to represent the number of columns per page; and (3) numbers between 1 and 92 were developed to represent the range of the number of rows in each column.

Prior to telephone interviews by students, the author located telephone numbers, checked off the numbers in the telephone directory (to avoid

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2 The number of private households of the sample collection includes the following municipalities only: St. John's, Mount Pearl, Paradise, and Wedgewood Park.

duplication), and recorded the numbers on a call sheet. The following stipulations were also considered:

(1) Busy Signal/No Answer

When interviewers dialed a busy/no answer number, they were to call the number three times on three different days. If after three attempts no response was received, the next number on the call sheet was selected and the procedure was repeated. This approach decreased sampling bias by enabling each household an equal probability of being selected.

(2) Inappropriate Number

Interviewers dialed the NEXT residential number on the call sheet when they arrived at:

1) a commercial/business number;

2) a disconnected number; or

3) exchanges found outside the survey area (listed in Appendix B).

(3) Column Completion

If procedure (1) and (2) resulted in a completed page (i.e. the bottom of a column/page in the telephone directory), the author selected the residential number ABOVE the original selection (BUT in the SAME column).

(4) Time of Call

The pretest considered the following times to be most appropriate to contact the majority of residents at home in the evening, outside working hours. During the data collection period, June 12 - 20, all weekday calling was conducted between 5:30 p.m. and 9:30 p.m. On Sunday, calls were conducted from 4:00 p.m. to 9:30 p.m. No calls were made on Friday evening or Saturday.

2.4 Response Rate

Interviewers were instructed to call each telephone number on call sheets and record ALL calls. Possible responses were no answer, busy, disconnected line, call back (i.e. when respondents were willing to participate in the survey but were too busy, a time was arranged to call back), uncooperative (i.e. respondents were unwilling to participate in the survey), incomplete interview (i.e. respondents stopped the interview without completing the entire questionnaire), and completed questionnaire. Using the sample population of 400 households, interviewers made 797 telephone calls and obtained 403 completed questionnaires for a response rate of 76 percent (Appendix C).

2.5 Coding and Editing

Coding and editing were conducted by the author, using the following steps: (1) data were made legible and coded for analysis; (2) data were evaluated to ensure consistency; (3) accuracy of the data were evaluated through consultations with interviewers to ensure that no bias occurred during data collection; and (4) interpretation of open-ended questions were clarified.

Data were entered by two people and cross checks were conducted to correct data entry discrepancies. Data were then prepared for analysis using SAS, an effective software package that performs several analytical procedures. Data were analysed using standard frequencies, correlations, T-tests, analysis of variance (ANOVA), and cross-tabulation analysis. The analysis measured data relating to current and potential demand, consumer demographics, and other market characteristics of the Christmas tree market of St. John's and surrounding area.

3.0 LIMITATIONS

The reader should be aware of several limitations in the survey. First, individuals who rent Christmas trees and businesses were excluded from the sample. Second, commercial cutters were not included in the survey since they cut trees for the retail market in addition to their personal use. Third, characteristics of the current Christmas tree industry (i.e. commercial suppliers) were not evaluated since the project only concentrated on the consumer market. The supply side of the market should form the basis of a separate study.

4.0 RESULTS AND DISCUSSION

The sample population was segmented into four groups to simplify the analysis: (1) real or natural tree users; (2) artificial tree users; (3) users of both natural and artificial trees; and (4) no tree users (that is, households who did not have any tree in their home last Christmas).

Chapter four is organized as follows. Sections of the survey questionnaire that were completed by ALL respondents can be found in Section 4.1. Section 4.2 contains an analysis of results of respondents completing questions relating to natural trees only. In addition, Section 4.3 focuses on households displaying natural trees that were either cut, purchased, or both (cut and purchased). Households using artificial trees only are profiled in Section 4.4, and households that used both natural and artificial trees last Christmas are discussed in Section 4.5. Finally, Section 4.6 provides an analysis of households that did not purchase any type of Christmas tree during the 1989 holiday season.

4.1 ALL HOUSEHOLD RESPONSES

Survey results indicate that the majority (57 percent) of respondents in St. John's and surrounding areas used natural trees last Christmas, and 33 percent used artificial trees (Figure 1)[3].

Results show that 38 households (9 percent) did not display a Christmas tree last year (Table 1). Excluding no tree households, about 66 percent of respondents displayed at least one natural tree, while smaller proportions had artificial and natural/artificial (both) trees. This implies that there was a large market for natural trees in the survey area last year.

Table 1 The number of consumer responses and percentages of natural, artificial, both, and non-Christmas tree users

	Consumer Responses		
Type of Tree	Number of Responses	Display Households	Total Households
		- percent -	
Natural	219	60	54
Artificial	125	34	31
Both	21	6	5
No Tree	38	-	9
Total	403	100	100[a]

[a] Total does not add to 100 due to rounding.

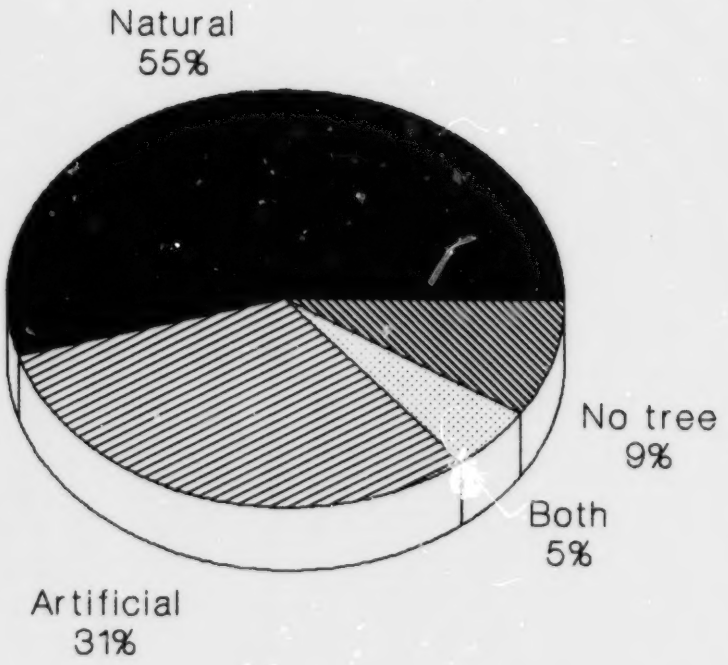
4.1.1 Demographic Profile of the Christmas Tree Market

a) Dwelling Type

Approximately 69 percent of those surveyed lived in single-detached

3 The higher percentages include households that displayed both types of trees.

Figure 1. Type of tree displayed by Christmas tree respondents



dwellings, 15 percent resided in duplex housing, 15 percent in apartments, and the remaining 1 percent lived in mobile homes. Roughly 58 percent of respondents living in single-detached houses used natural Christmas trees last Christmas (Table 2). A large proportion (31 percent) of apartment dwellers did not display a Christmas tree last year, and all respondents living in mobile homes used artificial trees last Christmas. These results imply that when people have more space with fewer or no tenant restrictions to abide by, natural trees are used more frequently than artificial trees.

Table 2 Type of dwelling displaying Christmas trees

	Type of Dwelling			
Tree Type	House	Duplex	Apartment	Mobile Home
	- percent -			
Natural	58	54	41	0
Artificial	31	34	25	100
Both	6	5	3	0
No Tree	6	7	31	0
Total[a]	100	100	100	100

[a] Total may not add to 100 due to rounding.

b) Family Structure

Results indicate that households consisting of children under the age of 18 may influence the type of tree used and whether or not a tree is displayed. Roughly 49 percent of those interviewed had no children aged 18 or under living in their home last Christmas, 22 percent had one child, 21 percent had two children, and 9 percent had 3 or more children under the age of 18 years.

Of the 51 percent of respondents with children, approximately 39 percent

had children between the ages of 12 and 18 years old, 37 percent had kids less than 5 years old, and the remaining 24 percent of households had children between the ages of 6 and 11 years old.

Figure 2 demonstrates that ALL families with children displayed a greater proportion of natural trees over artificial trees; however, families with children less than five years old displayed artificial trees more than families with older children. These results can be interpreted two ways. First, generally speaking, younger families prefer artificial trees. These families are busier and may find artificial trees more convenient to purchase, and easier to clean up. Second, families with young children may prefer artificial trees because they are more tidy with children at home. When children get older, however, they may prefer real trees.

The number and age of children in a household influenced the type of tree used. Survey results showed that only 2 percent of no tree households had children, whereas 61 percent of natural tree households had children, 30 percent used artificial trees, and 7 percent displayed both. These results imply that although children do not make the actual purchase decision, their presence in a household influences whether or not a Christmas tree is displayed and the type of tree used.

Of those respondents who did NOT have children under the age of 18, an estimated 46 percent of households used natural trees, 33 percent had artificial trees, 3 percent had both, and 18 percent did not have a tree (Table 3). However, the majority of households with children used a **natural** Christmas tree, and a large proportion of **both** tree households had three or more children. Thus, family structure is an important consideration when marketing natural trees.

Figure 2. Type of Christmas tree displayed by age of children

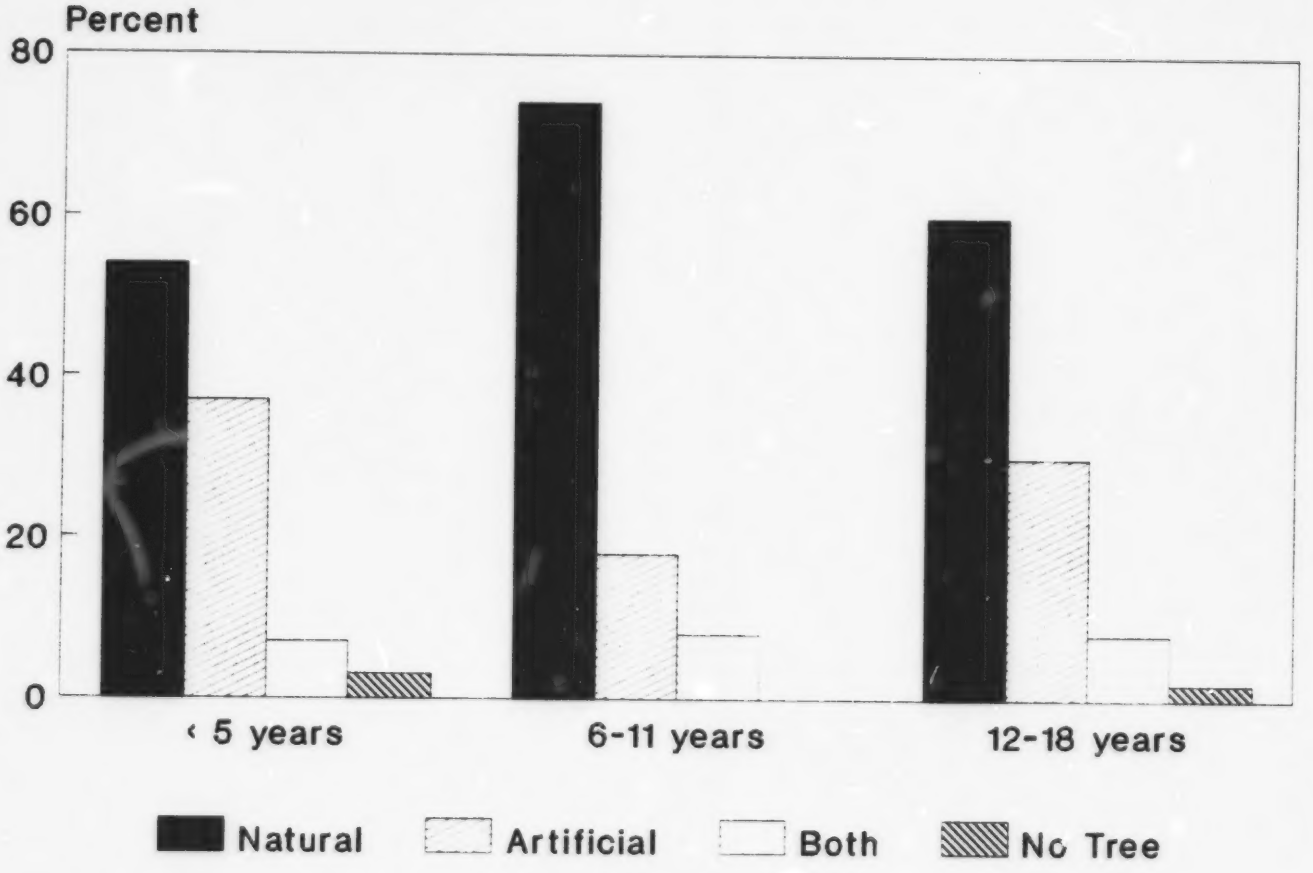


Table 3. Number of children aged 18 or younger in households displaying Christmas trees.

Tree Type	Number of Children			
	None	One	Two	Three +
	- percent -			
Natural	46	59	64	61
Artificial	33	36	25	25
Both	3	3	8	14
No Tree	18	2	2	0
Total	100	100	100	100

[a] Total may not add to 100 due to rounding.

c) Marital Status

About 61 percent of respondents were married, 28 percent single, and the remaining 11 percent either widowed, divorced, or separated. A greater percentage of all groups used **natural** Christmas trees (Table 4). Similarly, a large number of households displaying no tree were single, divorced, separated, or widowed. Thus, households containing two or more persons are more likely to display a tree.

Table 4. Marital status by type of Christmas tree displayed.

Tree Type	Marital Status				
	Single	Married	Divorced	Separated	Widowed
	- percent -				
Natural	46	59	62	50	42
Artificial	32	32	23	25	25
Both	3	6	0	0	8
No Tree	19	3	15	25	25
Total	100	100	100	100	100

d) Age

Approximately 48 percent of the survey population were between the ages of 25 and 44 years old (Figure 3). This age category encompasses the so called "Yuppie" (i.e. Young Urban Professional) segment of the population, a large and very influential group in terms of consumption and purchasing patterns. Typically, this group is accustomed to quality products that correspond to their affluent lifestyle. Roughly 59 percent of this segment used natural Christmas trees last year, 28 percent used artificial, 7 percent had no tree, and 5 percent displayed both natural and artificial trees. This group's preference for natural trees was encouraging, however, studies from other provinces indicate recent growth and increasing demand for artificial trees[4]. The apparent hectic lifestyle of the "Yuppie" segment could make the convenience of purchasing artificial Christmas trees more appealing. Thus, future marketing strategies of natural Christmas trees should be designed to bring out appealing characteristics of natural trees, such as tradition, freshness, and smell.

Natural Christmas trees are used significantly more than any other type of tree across ALL age groups, particularly in the age from 25 to 54 years (Table 5). This trend can be explained by traditional factors within the province, such as strong family units and accessibility to wooded areas near St. John's, which have made the acquisition of natural trees much easier. However, younger and older age groups used artificial trees, presumably due to the annual expense, lack of transportation, and the hassle associated with obtaining and setting up a natural tree year after year.

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4 Saskatchewan Christmas Tree Growers' Association, Market Study: Main Report, March 23 1989.

Pond Darren O. A Survey of Christmas Tree Preference in the Fredericton Area, April 12, 1990.

Figure 3. Age class of Christmas tree respondents

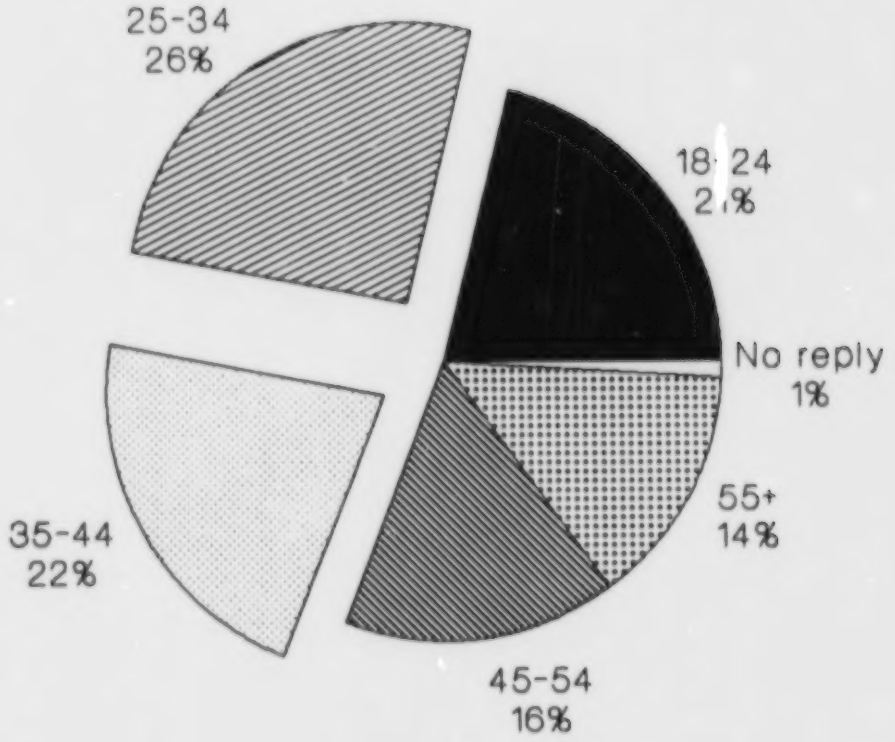


Table 5 Age of respondents by type of tree displayed

Tree Type	Age Categories				
	18-24	25-34	35-44	45-54	55 +
	- percent -				
Natural	47	53	66	62	40
Artificial	33	31	25	31	38
Both	6	4	7	5	5
No Tree	14	11	2	3	17
Total[a]	100	100	100	100	100

[a] Total may not add to 100 due to rounding.

e) Income

Approximately 24 percent of respondents refused to state their annual family income, therefore, questions dealing with income must be interpreted with some caution (Figure 4).

As income increased, more natural trees were used (Table 6). Similarly, 35 percent of respondents who earned less than $15,000 did not have a tree last Christmas; however, 15 percent of households earning a total family income greater than $60,000 displayed both natural and artificial trees last year. These results suggest that income influences whether or not a tree is used and the type of tree used (e.g. 62 percent of households earning more than $60,000 used natural trees last year).

Figure 4. Total family income of Christmas tree respondents

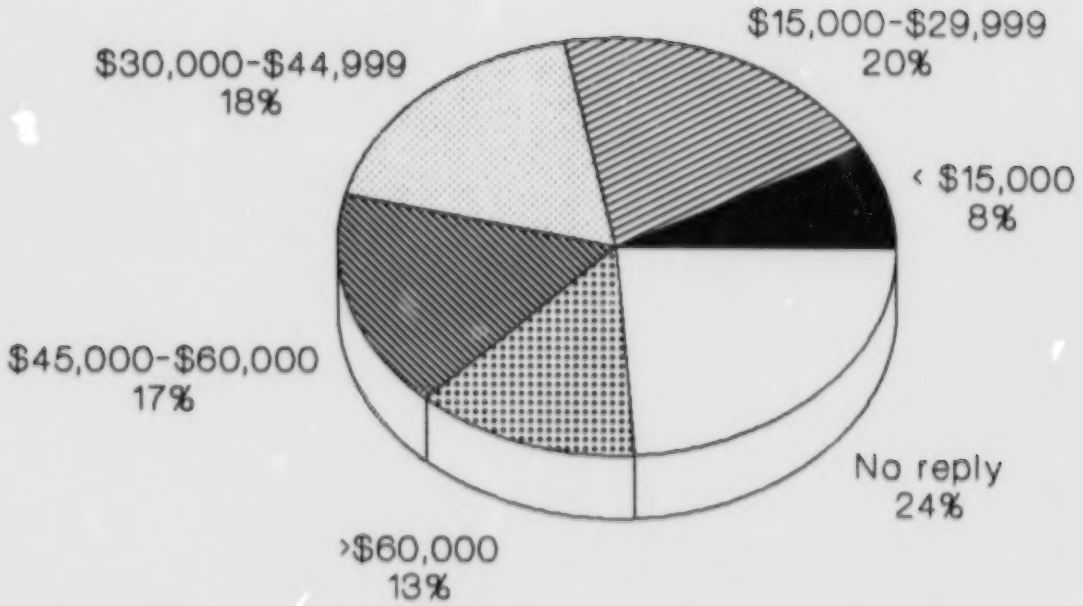


Table 6 Income of Christmas tree market by type of tree displayed

	Income ($)				
Tree Type	0-14,999	15-29,999	30-44,999	45-60,000	60,000 +
	- percent -				
Natural	35	57	59	60	62
Artificial	29	33	34	29	17
Both	0	2	1	4	15
No Tree	35	9	5	6	6
Total[a]	100	100	100	100	100

[a] Total may not add to 100 due to rounding.

f) Summary

Figure 5 summarizes the main demographic characteristics of the entire Christmas tree market in St. John's and surrounding areas. The percentages represent the majority of each characteristic.

Figure 5 Demographic profile of Christmas tree market

Characteristic	Natural	Artificial	Both	No Tree
Marital Status	66% Married 24% Single	62% Married 30% Single	71% Married 19% Single	58% Single 18% Married
Dwelling Type	73% House 15% Duplex	67% House 17% Duplex	76% House 14% Duplex	47% Apartment 42% House
# Children	42% None 25% Two	51% None 25% One	33% Two 29% None	89% None
Income	26% $15-29,999 25% $30-44,999 24% $45-59,999	29% $15-29,999 28% $30-44,999 22% $45-59,999	57% $60,000 +	40% < $15,000
Age	27% 35-44 26% 25-34	26% 25-34 22% 18-24	29% 35-44 23% 18-24	32% 18-24 32% 25-34 26% 55 +

4.2 NATURAL TREE HOUSEHOLD

Two methods of obtaining natural Christmas trees are by purchasing from commercial vendors or cutting. Approximately 56 percent of natural tree users purchased their tree(s) (12,378 trees), 43 percent cut trees themselves (9,504 trees), and 1 percent both purchased and cut their trees (i.e. 221 trees) (Figure 6).

4.2.1 Market for Natural Trees

Natural tree households constituted 54 percent of the survey population. Approximately 90 percent of real tree users displayed one tree, 9 percent showed two trees, and one percent had three natural trees.

The 1986 census recorded 36,875 private households in the survey area. From survey results, 54 percent of private households used an average of 1.1 natural trees last Christmas. Therefore, the overall market for natural trees in St. John's and surrounding areas last Christmas was an estimated 22,103 trees.

4.2.2 Characteristics of Natural Tree Households

Roughly 35 percent of respondents stated that family tradition was the most important reason they used natural trees last Christmas, 23 percent liked the smell of real trees, and 11 percent disliked artificial trees (Figure 7). Thus, natural Christmas trees were used for generations, before artificial trees were ever thought of, and advertising strategies can be targeted to depict the family tradition associated with real Christmas trees. Other reasons for obtaining natural trees included preference for natural trees, good appearance, Christmas spirit and/or the feeling of Christmas created by real trees, children and/or family preference for natural trees, price, and color.

Figure 6. Percent of natural trees: purchased, cut, or both

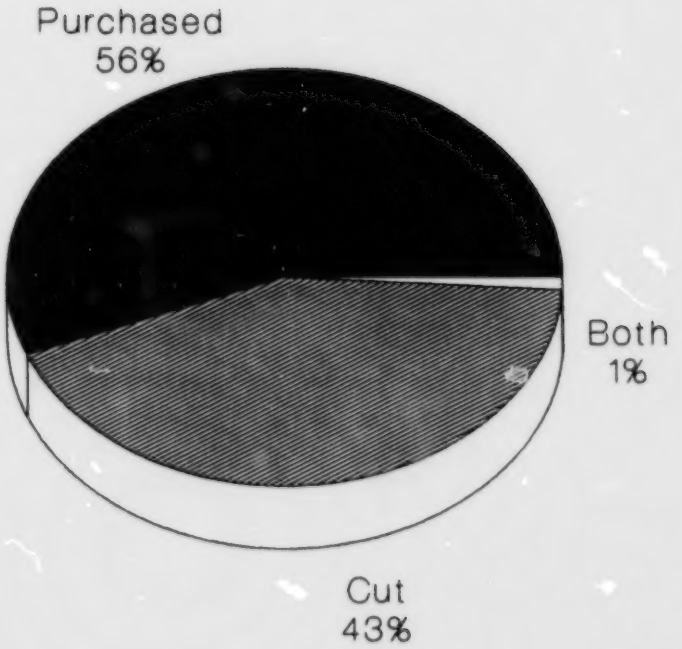
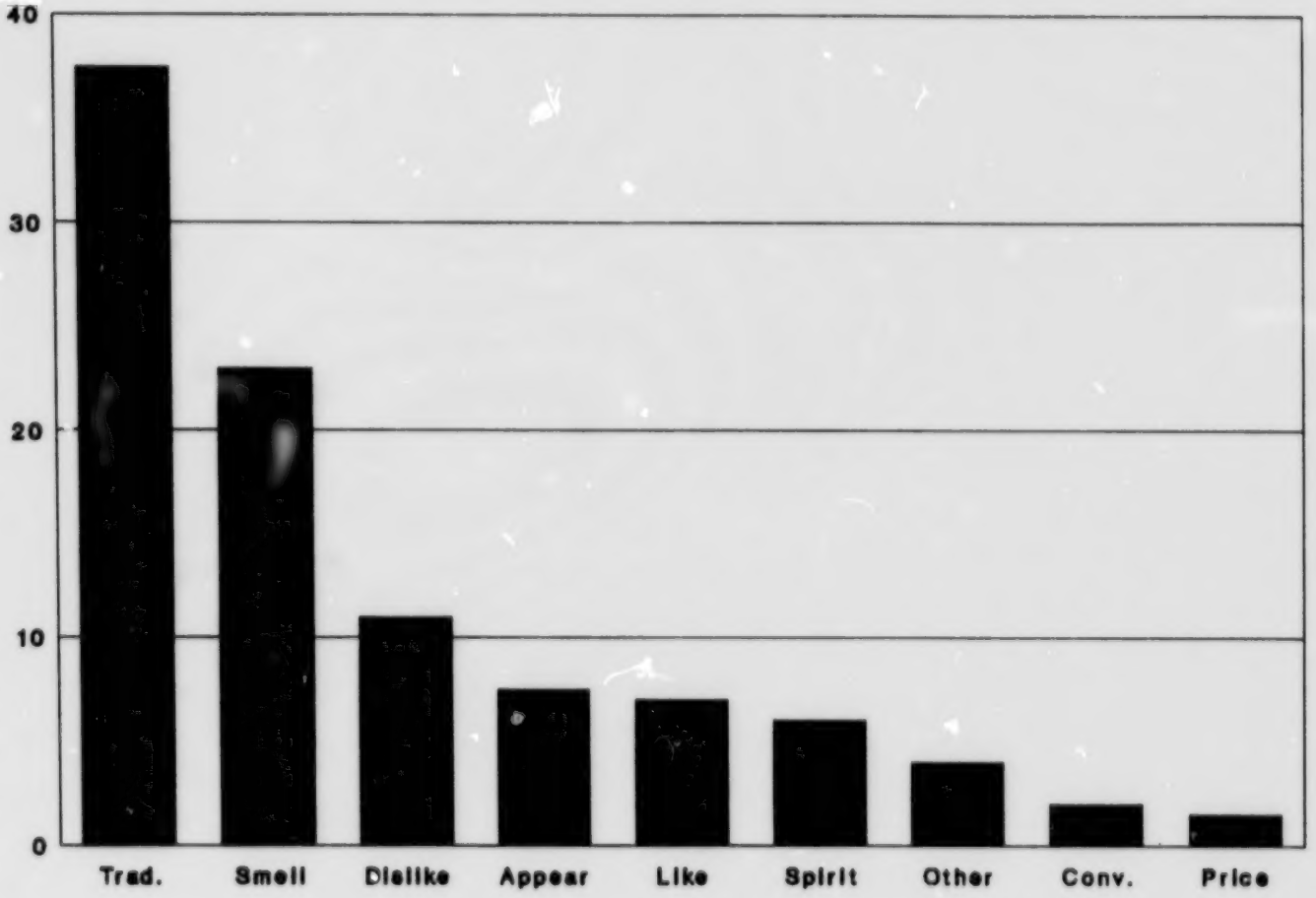


Figure 7. Reason for obtaining a natural Christmas tree.



4.2.3 Disposal of Natural Trees

About 32 percent of real tree users utilized **regular garbage pickup** to dispose of their tree(s), 22 percent take their tree(s) to a collection point or dump, 22 percent used the remains for firewood, 19 percent took advantage of special pickup service offered by municipalities, 4 percent used trees for other purposes such as compost, and the remaining 1 percent were uncertain. Thus, respondents did not appear to have any trouble in finding a method to dispose of their trees.

4.2.4 Species Used/Preferred

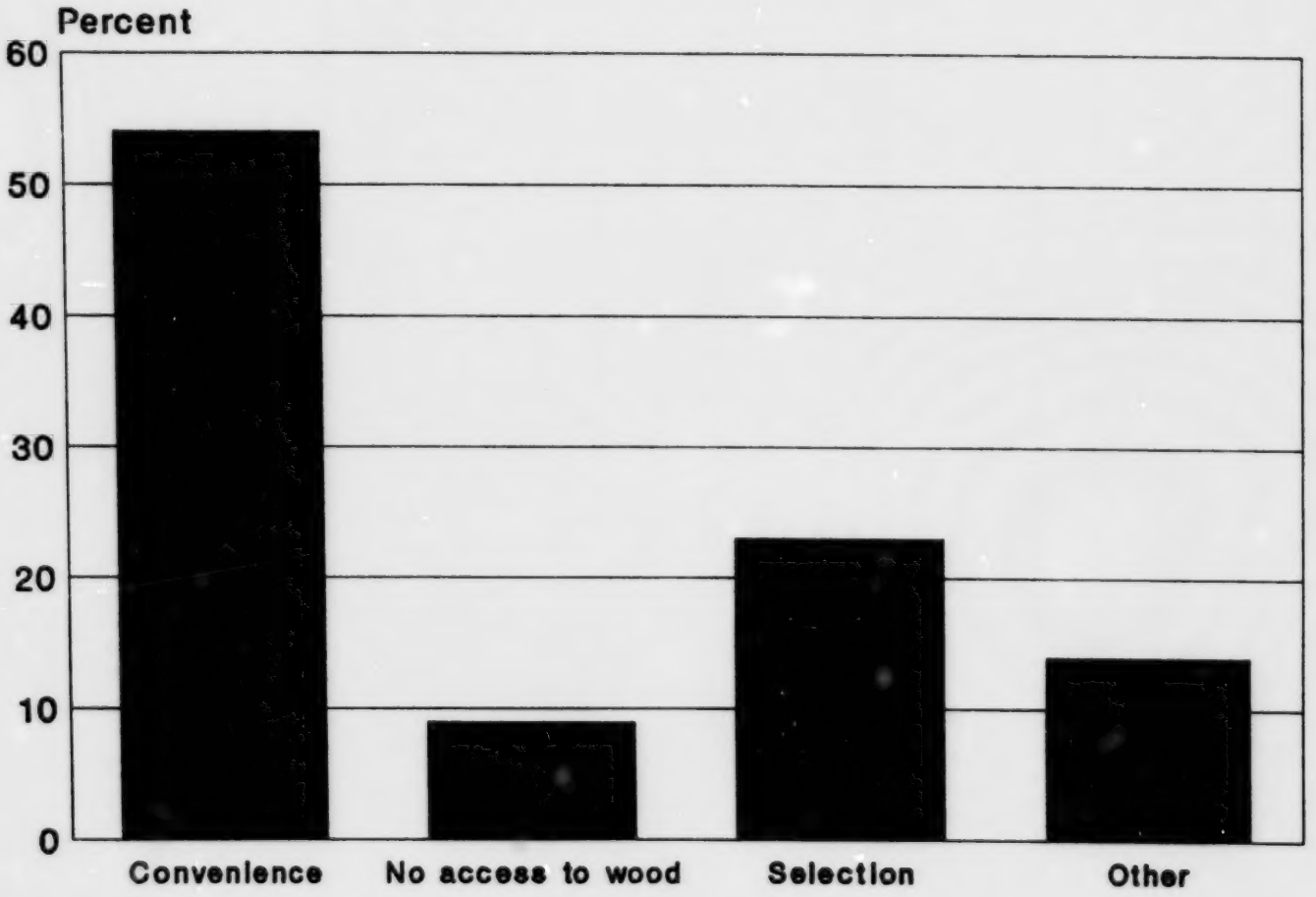
Approximately 92 percent of natural tree households used **spruce or fir species** last Christmas (20,335 trees); and 8 percent used pine trees (1,768 trees). When asked to state their preference of tree species, 64 percent of real tree users preferred spruce or fir (i.e. 14,146 spruce or fir trees), 21 percent favored pine (i.e. 4,642 pine trees), and 15 percent had no preference. Thus, the majority of cultivated Christmas tree production should be geared toward spruce and/or fir species.

4.3 PURCHASED NATURAL TREES

An average of 1.2 real trees per household were purchased last Christmas. About 54 percent of real trees purchasers found it **more convenient** to purchase rather than cut their tree, 23 percent stated that it was easier to buy a nice tree rather than search for one in the woods, and 9 percent said the woods were inaccessible to them. Other reasons for purchasing real trees included age, cost of cutting trees, and uncertainty of where to cut trees (Figure 8).

The average **height** of purchased trees was about **7 feet** (2.13 m). In addition, there was direct correlation between the height of a natural tree and the **number** of trees purchased. For example, when respondents purchased a second

Figure 8. Reason for purchasing natural Christmas trees vs.cutiing



tree, the height of the tree was greater than that of the first tree purchased.

A direct relationship existed between the number of natural trees purchased and the number of days before Christmas natural trees were purchased. For example, fewer trees are purchased as Christmas Day draws closer. Similarly, the greater the number of days before Christmas, the greater the number of trees purchased. Last year, ALL real tree households obtained their tree an average of **5 days** before Christmas. This time frame should be recognized by Christmas tree suppliers to guarantee that there is an adequate number of trees available at least one week before Christmas Day, and increase the quality and freshness of cultivated trees.

Almost all respondents (89 percent) indicated that they purchased their tree from **commercial vendors** located in various parking lots in and around St. John's. Such locations, situated near shopping malls, are very accessible and convenient for shoppers with transportation, especially during Christmas, and thus are excellent places to market Christmas trees.

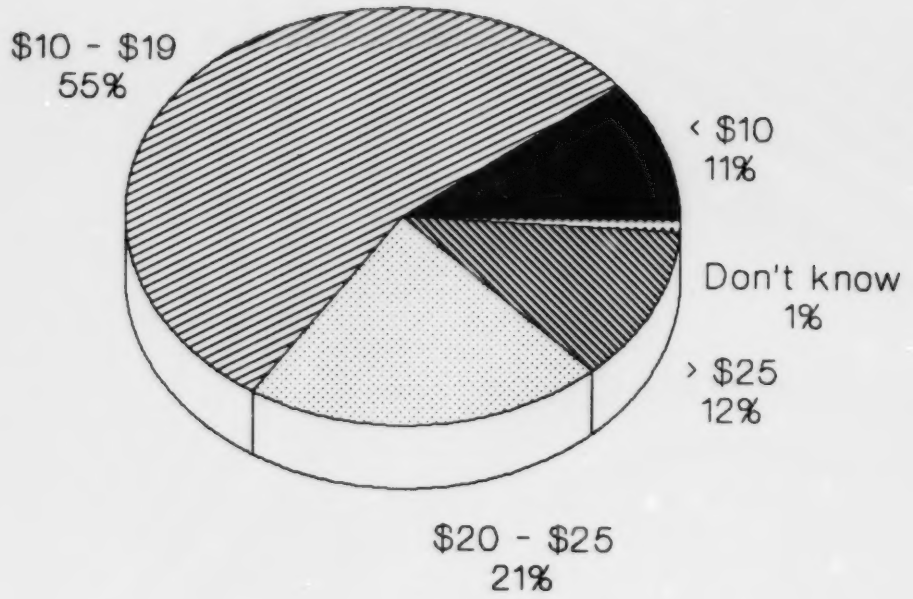
4.3.1 Price of Natural Trees

During the 1989 holiday season, 55 percent of real tree households paid in the range of $10-19 for their tree, 12 percent paid more than $25, while 11 percent paid less than $10 (Figure 9). Only 12 percent felt that the price they paid was unreasonable or very unreasonable.

There was very little relationship found between the price paid for natural trees and total annual family income of real tree users. With the exception of those natural tree respondents earning less than $15,000 annually, the price paid for Christmas trees was distributed evenly across all income groups.

Approximately 38 percent of respondents who paid more than $25 for their tree last Christmas said that they would pay nothing more for an ideal tree;

Figure 9. Price paid for natural trees last Christmas



however, 50 percent indicated they would be willing to pay an amount less than $10. Surprisingly, 13 percent of respondents who paid more than $25 last year would be willing to pay an additional $15 or more (i.e. at least $40 in total). About 34 percent of all natural tree purchasers said they would pay nothing more, and only 7 percent would pay more than $15 (Figure 10).

4.3.2 Household Member Obtaining Natural Christmas Trees

Figure 11 demonstrates the difference between which household member cut or purchased natural trees. As the figure shows, the male head of the household cut almost 50 percent of natural trees and purchased 34 percent of natural trees last Christmas. On the other hand, 15 percent of female household heads bought natural trees and only 3 percent cut real trees. Results indicated that when both household heads searched for natural Christmas trees, it was more likely that the tree would be purchased. Roughly 12 percent of respondents indicated that friends or relatives cut trees for them as opposed to the 3 percent who purchase for them. Thus, although the male head of the household purchased or cut real trees more frequently than the female head, the female head had great input in the actual decision. Marketing efforts should be generated toward both household heads with a family in mind.

4.3.3 Natural Christmas Tree Characteristics

Figure 12 shows the difference between the importance of Christmas tree characteristics of real tree respondents. No significant difference exists between the means of users of spruce/fir and users of pine, nor is there a significant difference between those real tree users who cut and purchased real trees when related to Christmas tree characteristics such as color, freshness, density, height, or species on a scale of 1 to 10. Thus, real tree respondents rated the importance of each characteristic about the same creating little difference between the two means.

Figure 10. Amount natural tree buyers willing to pay over last year's price

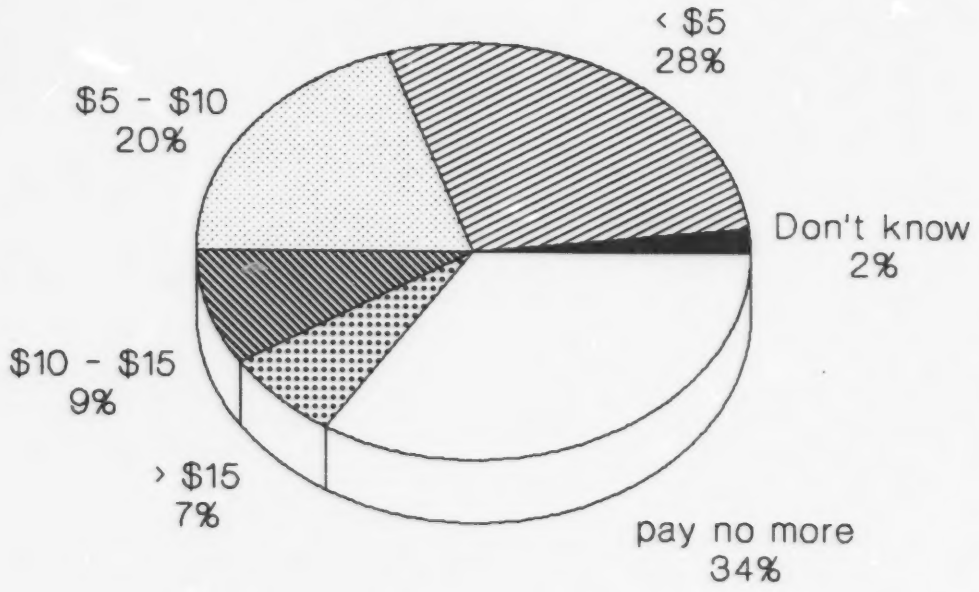


Figure 11. Household member who obtained (cut/purchased) natural tree

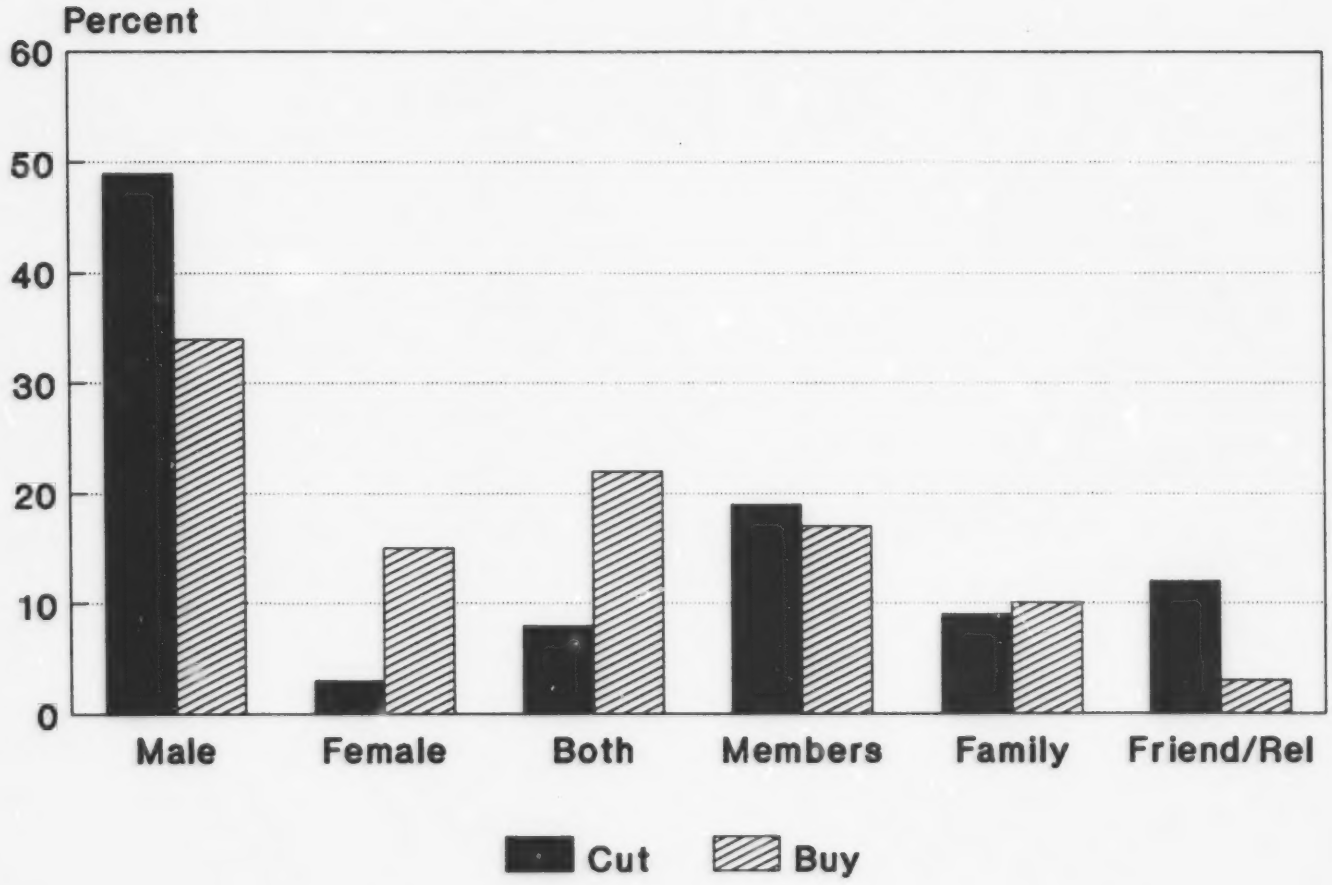
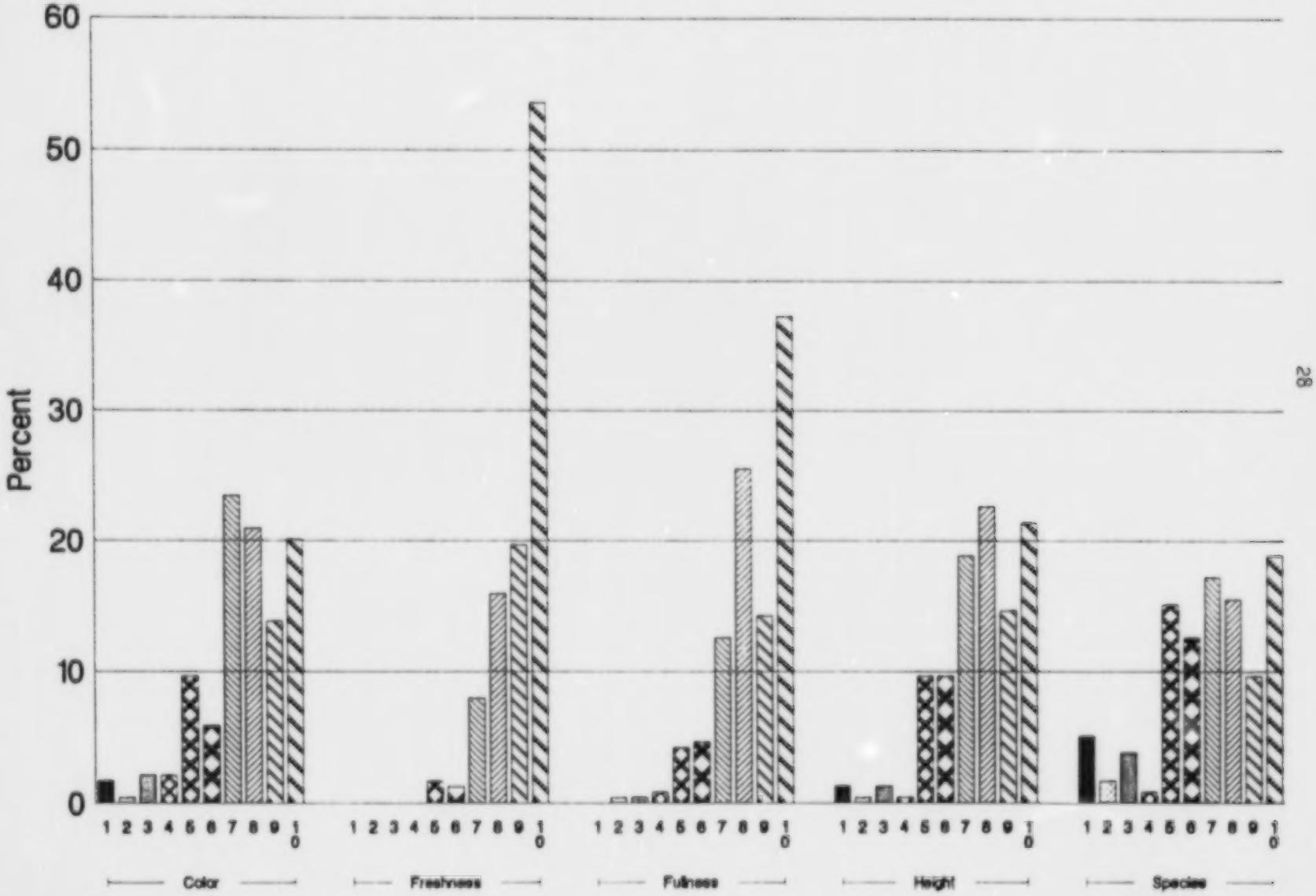


Figure 12. Ranked (scale of 10) importance of natural Christmas tree characteristics



4.4 CUT NATURAL TREES

As mentioned above, about 43 percent of natural tree households cut their tree(s) last Christmas. Respondents traveled 17 kilometers to cut an average of 1.3 trees per household, and stated family tradition as the main reason they preferred cutting to purchasing trees (Figure 13). The family unit appears to be an important factor when cutting trees, either as tradition, a family outing, or pure enjoyment of cutting trees and the outdoors. Therefore, marketing strategies for cultivated tree farms should target this segment of real tree users by promoting the family unit and tradition associated with purchasing real trees. 'Pick-and-Cut' farms would be an excellent avenue to capture this segment of the real tree market[5].

The average height of the first tree cut was 7 feet (2.13 m), second tree 7.7 feet (2.35 m), and the third tree 8.3 feet (2.52 m). As indicated in section 4.3, the height of natural trees for purchasers and cutters should be at least 7 feet (2.13 m).

4.5 ARTIFICIAL TREE HOUSEHOLD

Approximately 31 percent of households surveyed used artificial trees during the 1989 holiday season. The majority (94 percent) of respondents had one artificial tree and 6 percent had two trees. Artificial trees ranged in height from 5 to 8 feet (average 6.4 feet). The longevity of artificial trees was quite high as 34 percent of respondents indicated they had owned an artificial tree for more than 10 years. In addition, 38 percent of respondents indicated that they have purchased only one artificial tree; 31 percent replaced it after 10 years; 18 percent between 5 and 10 years; and 10 percent between 3 and 5 years.

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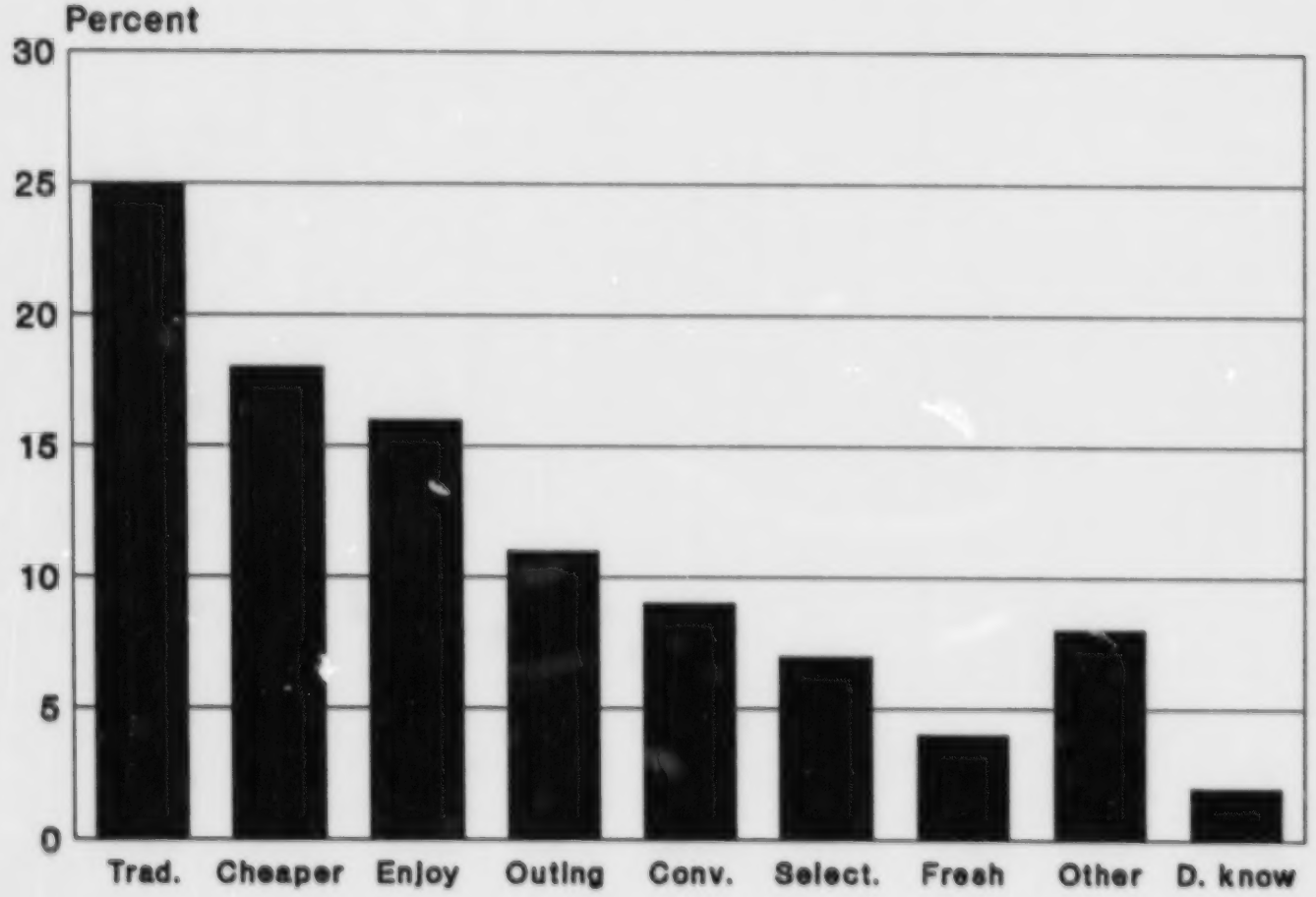
5 Pick-and-Cut farms are cultivated tree farms that consumers visit, choose the tree they want, and have it cut to take home.

Figure 13. Reason for cutting natural Christmas trees vs. purchasing



Although 80 percent of respondents use artificial trees every Christmas, the remaining 20 percent stated that they like to alternate their use of artificial trees from year-to-year. Thus, a percentage of the artificial tree market were not entirely loyal to artificial tree usage for consecutive years, creating an opportunity for high quality local trees.

Figure 14 indicates that approximately 44 percent of respondents paid less than $99 for their artificial tree. Another 15 percent paid between $100 and $199, 4 percent paid more than $200 for their tree, indicating a more exclusive tree with a natural tree appearance. In addition, only 6 percent of respondents felt that the price they paid was unreasonable or very unreasonable.

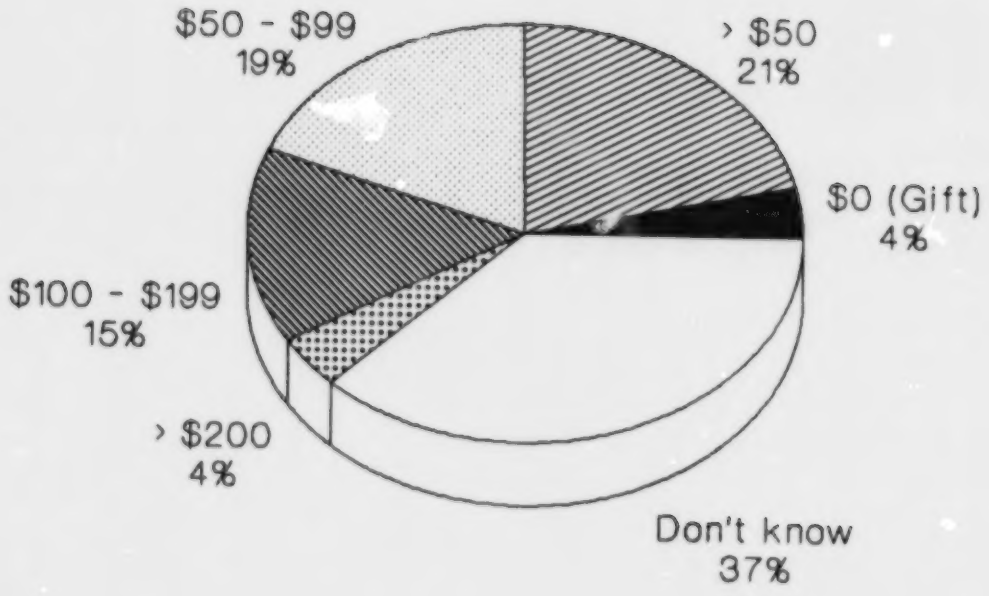
Although the artificial market was smaller than the natural tree market in the survey, evidence from other provinces indicated that preference for artificial trees is growing. Corporations such as Noma have introduced new artificial trees that look more real with differing colors, height, and adjustable branches. In order to remain competitive, natural tree growers will have to promote their products vigorously in an increasingly competitive industry.

4.6 NATURAL/ARTIFICIAL (BOTH) TREE HOUSEHOLD

Approximately 5 percent of all households surveyed displayed both natural and artificial trees in their homes last Christmas. Since the analysis was conducted on natural and artificial trees separately, the same results would apply to users of both tree types; therefore, a demographic profile is provided for both tree households.

Roughly 71 percent of both tree households consisted of married couples with at least one child. Approximately 76 percent of both tree respondents resided in single detached dwellings. Total family income exceeded $60,000 in

Figure 14. Price paid for artificial Christmas trees.



57 percent of both tree households surveyed, and about 72 percent of respondents were between 18 and 44 years of age. These results imply that young households with children and high incomes would be more likely to display both natural and artificial Christmas trees.

4.7 NO TREE HOUSEHOLD

Approximately 9 percent of households surveyed did not display a Christmas tree during the 1989 holiday season. When asked to state the reason why a tree was not exhibited in their homes last Christmas, two-thirds said they were **away for the holidays**; however, 72 percent of them said they had used trees in the past. Of the 55 percent of no tree respondents planning to have a tree in the future, 43 percent said they would have artificial trees, 38 percent would have real trees, 5 percent would have both, and 14 percent were undecided as to the species they would obtain.

Generally speaking, no tree households were composed of single individuals with low incomes (i.e. less than $30,000). The majority were younger than 29 years of age and older than 65 years old, and they resided in single-detached dwellings. Approximately 90 percent of them had no children and a majority of non-users were unemployed, either as students or retired citizens.

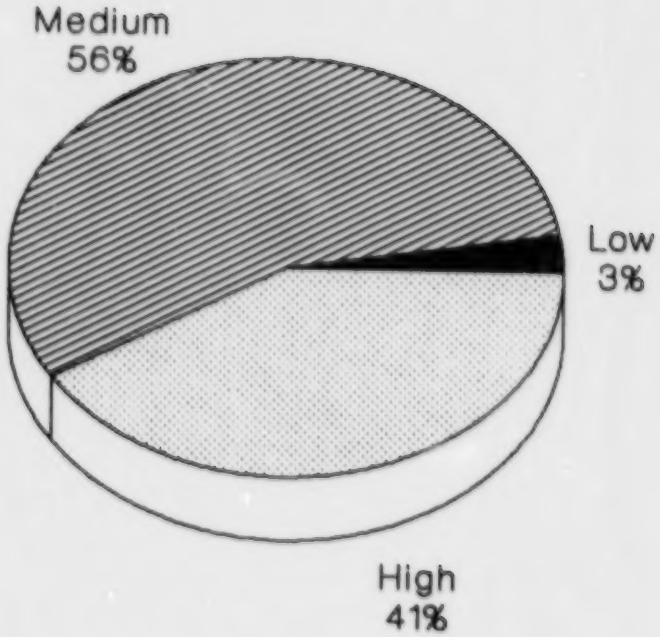
4.8 CHARACTERISTICS OF THE MAIN INDOOR TREE

The following section was completed by ALL respondents except those who did not have a tree in their home last Christmas.

4.8.1 Height

When searching for the ideal tree, on average, respondents prefer a height of about 7 feet (2.13 m). Potential Christmas tree growers should pay close attention to the height of trees before cutting. Figure 15 indicates that more

Figure 15. Preferred density of ideal Christmas tree



respondents prefer a medium density tree, that is, fullness or bushiness of a tree, and very few prefer low density Christmas trees.

4.8.2 Density and Shape

Growers should understand **where** households display their Christmas tree(s) so that local trees can be shaped accordingly. Approximately 70 percent place the tree in the corner of a room, 13 percent by a window, 11 percent against one wall, and 6 percent in the center of a room (Figure 16). Although the majority of respondents prefer to put a tree in the corner of a room, trees should be well-shaped all around. Consumers generally search for a tree that is well-shaped (and trim what is not needed).

4.9 FUTURE INTENTIONS OF THE SURVEY POPULATION

All persons who did not use a tree last Christmas did not respond to this question in the survey; therefore, results must be interpreted accordingly. Approximately 51 percent of natural tree users anticipate to purchase or cut real trees next Christmas (Table 7). On the other hand, 33 percent will use the same artificial tree; however, only 5 percent of respondents plan to purchase **new** artificial trees next Christmas, indicating small demand for new artificial tree purchases.

Table 7 also indicates that current buying trends will remain consistent as similar percentages of each tree type anticipate the same consumption patterns as last year. However, there are favorable indicators for natural tree usage in the future.

Figure 16. Where households display Christmas tree last year.

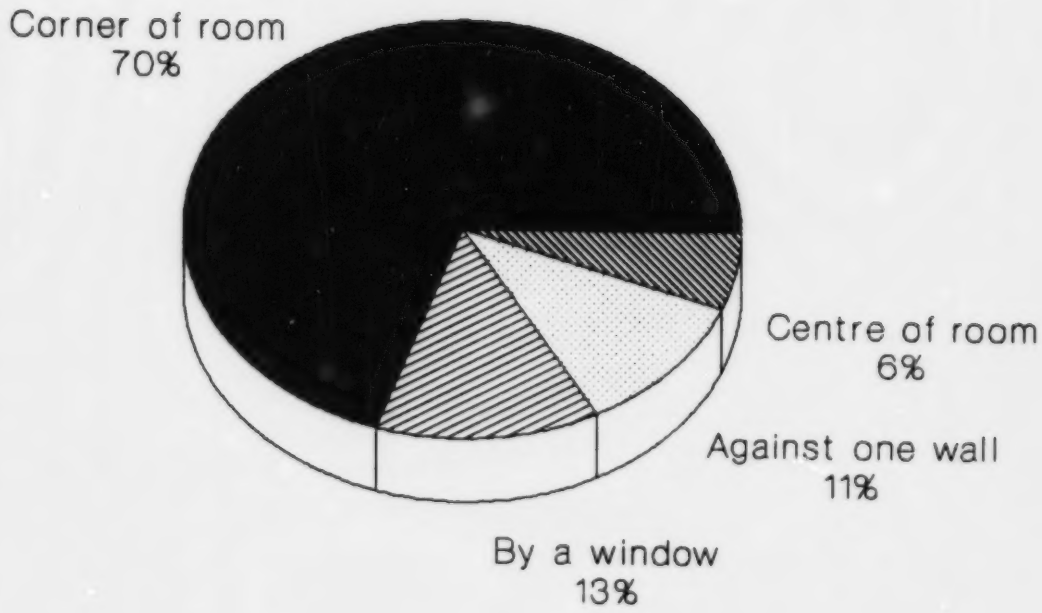


Table 7. Future intentions regarding Christmas tree consumption by type of tree displayed last year.

Future Intention	Type of Tree			
	Natural	Artificial	Both	Total
	- percent -			
Purchase Natural Tree	31	1	3	35
Cut Natural	24	1	1	26
Purchase of Artificial	3	2	0	5
Use Same Artificial	0	28	5	33
Have No Tree	1	0	0	1
Total	59	32	9	100

4.10 ATTITUDE AND BELIEF MEASUREMENT

Most respondents (86 percent) felt there were too many Christmas trees cut each year resulting in wastage, while only 13 percent of respondents felt that the number of trees cut each year was sufficient (Figure 17). These results should give cultivated tree farmers an incentive to provide consumers with 'Pick-and-Cut' farms to reduce wastage, especially in recent years with increasing environmental concerns.

Respondents offered several solutions to alleviate the problem of wastage. Some suggestions included placing restrictions or monitoring cutters (both vendors and individuals), using more artificial trees, placing orders for Christmas trees before cutting commences, and establish cultivated tree farms (Figure 18). Other suggestions included increasing fines, educating vendors, designating cutting areas, and cutting your own tree(s). Each recommendation is viable and provides further support for establishing cultivated tree farms, excluding the 14 percent of respondents who felt that artificial trees should be

Figure 17. Opinion of respondents regarding number of trees cut each year

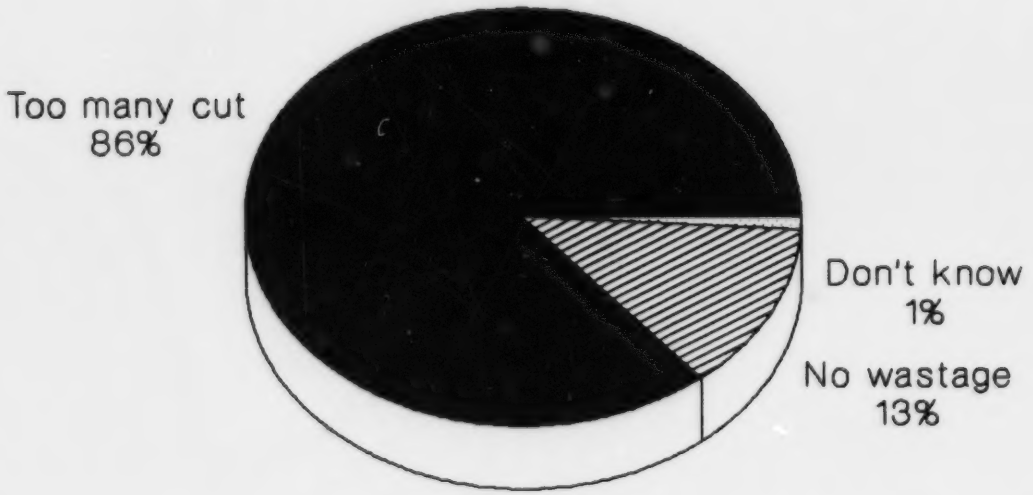
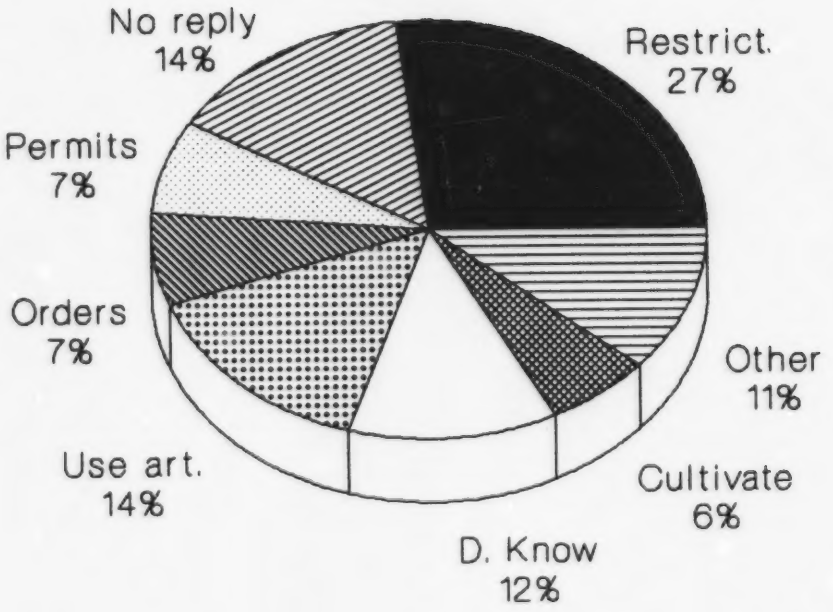


Figure 18. Suggestions to decrease wastage of Christmas trees cut each year



used. However, 63 percent of these respondents were artificial tree users, and presumably they would not mind the elimination of Christmas tree cutting.

4.11 MARKET FOR CULTIVATED TREES

Respondents were asked if they would purchase locally grown cultivated Christmas trees if available at competitive prices. Approximately 76 percent of ALL Christmas tree users said they would be willing to purchase cultivated Christmas trees. Surprisingly, 65 percent of artificial tree users said they would purchase locally grown cultivated trees; 41 percent who use artificial trees EVERY Christmas said 'yes'; 79 percent who use artificial but not every Christmas also said 'yes'. Such results are encouraging to the establishment of cultivated tree farms and indicate that artificial tree users are not entirely loyal. In addition, 82 percent of natural tree users responded 'yes' and 81 percent of natural/artificial (i.e. both) also said they would be willing to purchase locally grown cultivated trees at competitive prices.

Figure 19 demonstrates how households using real, artificial, and both trees feel about purchasing cultivated Christmas trees. About 50 percent of the natural tree users would purchase cultivated trees, while an additional 23 percent of artificial tree households said 'yes'.

However, although results are favorable, they must be interpreted cautiously because sometimes what people say and actually do are different (i.e. some respondents may like the idea of cultivated trees, but they themselves may not purchase one).

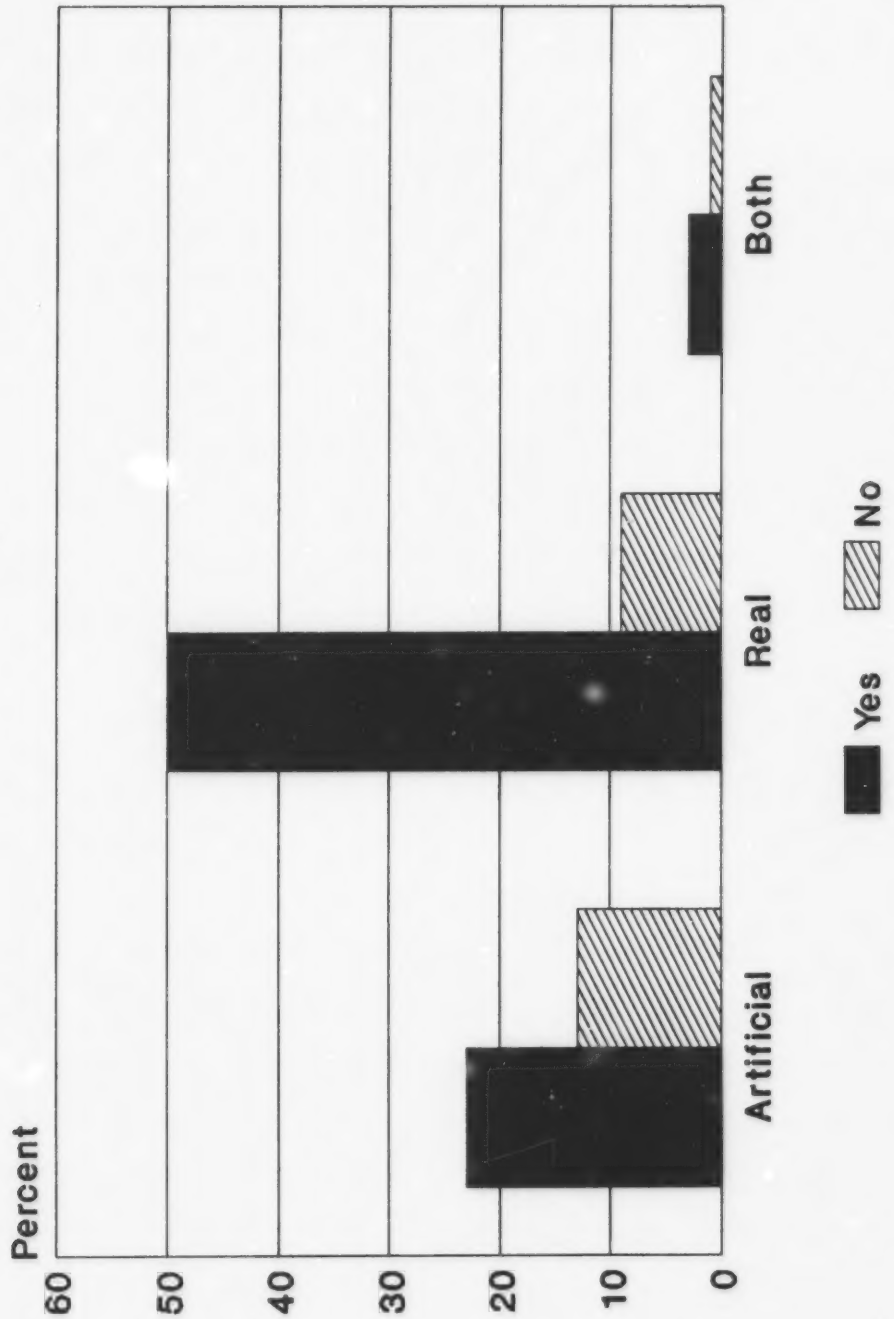


Figure 19. Market for cultivated Christmas trees.

5.0 CONCLUSIONS

In its evaluation of the establishment of cultivated Christmas tree farms in Newfoundland, government agencies and interested individuals should first consider the following market characteristics:

1. Demographic Profile of Natural Christmas Tree Market

In general, respondents using natural Christmas trees last Christmas were young families (i.e. 25-44 years) residing in single detached homes. About 67 percent of respondent's total family income was greater than $30,000 and children were present. This appears to be the target market for cultivated Christmas trees since the segment is young, influential, and has more disposable income than other segments. This group comprises a large proportion of the population, and their consumption patterns largely influence those of other segments.

2. Market for Purchased Natural Christmas Trees

About 56 percent of natural Christmas trees were purchased (12,398 trees) last year. Thus, the market for natural trees, mostly spruce and fir, is already very strong and with the high incidence of respondents stating family tradition as the main reason for displaying natural trees, this trend is expected to continue. In addition, almost all respondents who displayed natural Christmas trees last year anticipate to use natural trees next Christmas. Such market conditions support the establishment of cultivated tree farms at competitive prices (e.g. no greater than $40 per tree).

3. Market for Cut Natural Christmas Trees

Approximately 43 percent of natural tree households cut their tree(s) last

Christmas (9,504 trees). Therefore, this segment is quite substantial and should be considered further. This group is similar to those that purchased their natural trees with the exception that they preferred to cut trees. 'Pick-and-Cut' cultivated tree farms would be an excellent alternative for this segment because they would be outside, participating in cutting their tree(s).

4. Market for Artificial Christmas Trees

Approximately 31 percent of households surveyed used artificial trees last year. The findings from the research indicate a stable market for artificial trees; however, contrary to studies conducted in other provinces, demand for artificial trees in St. John's and surrounding areas is expected to remain stable with minimal growth. On the other hand, artificial trees have an average life expectancy of at least ten years, and with recent improvements in the quality of artificial trees, they pose a serious threat to the natural Christmas tree market.

5. Market for Cultivated Christmas Trees

About 76 percent of the survey population expressed an interest in purchasing cultivated Christmas trees if available at competitive prices. Purchasers of natural trees would not be willing to pay any more than $40 for a natural tree. However, approximately 76 percent of natural Christmas tree users paid between $10-25 last year. It is recommended that the price of cultivated Christmas trees not exceed $40 for large trees, and average $15-20 per tree. Therefore, any price outside of this range would discourage most consumers from purchasing cultivated Christmas trees.

6.0 RECOMMENDATIONS

The findings of the research indicate strong evidence for the recommendation of establishing cultivated Christmas tree farms. As part of the recommendation, it is suggested that studies be conducted on the technological aspect of growing cultivated Christmas trees, in particular, spruce and fir species. Topics such as soil samples and location of tree farms must be addressed.

The Christmas tree market in Newfoundland and other provinces is extremely competitive. This is expected to increase during the 1990s as corporations develop higher quality artificial trees to match the appearance of natural trees. The following list of recommendations relate to the consumer market in the survey area and the steps to take to reach the target market.

6.1 ONGOING MARKET ANALYSIS

The provincial Christmas tree market must be surveyed to determine other areas of the province with potential. In particular, larger centers, on the Island portion of the province such as Corner Brook, Grand Falls, Gander, and Marystown should be concentrated on. In addition, Labrador City, Wabush, and Goose Bay are possible markets.

Institutional and commercial establishments represent a potential market for cultivated Christmas trees. Research should be conducted on businesses to discover the size and characteristics of the market.

Time series studies should be conducted every three to five years to obtain data for determining market trends such as:

- changing consumer attitudes regarding Christmas tree consumption and characteristics (e.g. species, density, color, height);

- consumer demographics affecting the target market for cultivated Christmas trees; and
- demand for natural and artificial Christmas trees.

6.2 PROMOTIONAL AND MARKETING STRATEGIES

Aggressive promotional and marketing strategies must be adopted to create public awareness regarding cultivated Christmas trees. A program should be in place about two weeks before Christmas and should focus on the high quality and freshness of cultivated Christmas trees. Advertising campaigns could use themes dealing with family tradition, natural tree appearance, and smell which are high on the list of respondent's reasons for obtaining natural Christmas trees.

In promoting the quality and freshness of cultivated trees, artificial tree households may be swayed toward purchasing a cultivated Christmas tree. One of their largest concerns with natural trees was the mess created by them. Through advertising, consumers can be educated regarding the proper care required for trees and fire prevention with natural trees.

As society becomes increasingly conscious of the environment, promotional campaigns for cultivated Christmas trees can address environmental issues while marketing the Christmas trees. For example, although natural Christmas trees are thrown away after Christmas, they can be put to good use by individuals or municipalities (e.g. compost, wood chips for gardens).

6.3 PICK-AND-CUT OPERATIONS

'Pick-and-Cut' operations provide consumers with the opportunity to engage in outdoor activity while choosing their very own tree. In so doing, consumers are getting exactly what they want and there is limited wastage of unwanted trees.

Other benefits of these operations include the personal satisfaction associated with having nice tree, knowing that the tree is fresh and of high quality, an opportunity for a family outing, and the convenience, in terms of time and hassle, associated with not actively having to search through wooded areas to find a nice tree.

Similarly, small cultivated Christmas trees can be removed from the ground and placed in **flowering pots.** In so doing, instead of throwing trees away after Christmas, they can be kept (with proper care) until Spring when they can be planted. This operation may be more expensive for consumers, but, in the end, they will have a nice tree that can be planted, not wasted.

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APPENDICES

APPENDIX A

CHRISTMAS TREE MARKET SCREENING QUESTIONNAIRE

QUESTIONNAIRE NUMBER _____

Date: June _____, 1990 Time of Call: _____ p.m.

Interviewer's I.D.: _____ Interviewer's Initials: _____

Telephone No.: _____ - _____

INTRODUCTION

Good evening! My name is _____, and I am calling on behalf of Forestry Canada. I am carrying out a survey of households in and around the St. John's and Mount Pearl area about their Christmas tree use last Christmas.

You were randomly chosen from the telephone directory to be included in our survey. If I may, I would like to ask a few questions to you or someone in your home over the age of 18 with knowledge of your Christmas tree consumption last Christmas. It will take **between 8 and 10 minutes** of your time, and all information collected will be included with hundreds of others participating in this survey and **will be kept confidential**.

If this is not a convenient time, may I call back later this evening? Yes / No
When? _____ p.m. Thank you!

1a. Did you have a Christmas tree in your household during the 1989 holiday season?

a. yes ..... ☐ **(GO TO Q. 1b)**
b. no ..... ☐ **(GO TO Q. 8)**
c. uncooperative ..... ☐ **(STOP)**

└──────> Thank you for your time.

A Study of the Christmas Tree Market for St. John's and Surrounding Areas

FORESTRY CANADA
TELEPHONE SURVEY OF CHRISTMAS TREE MARKET - JUNE 1990

1b. Did you have any <u>real</u> trees last Christmas?

a. yes ..... ☐ **(GO TO Q. 1ba)**
b. no ..... ☐ **(GO TO Q. 1c)**

1ba. How many <u>real</u> trees did you have:

a. inside your home ..... ____
b. outside your home ..... ____

1c. Did you have any <u>artificial</u> trees (>6 feet) in your home last Christmas?

a. yes ..... ☐ **(GO TO Q. 2 IF ALSO REAL)** **(GO TO Q. 5 IF <u>ONLY</u> ARTIFICIAL)**
b. no ..... ☐ **(GO TO Q. 2)**

[COMPLETE Q.2 ONLY IF A <u>REAL</u> TREE WAS USED LAST CHRISTMAS - SEE Q1b]

2. REAL

2a. What type of tree(s) or species did you use in your home last Christmas? Did you use:

a. spruce/fir **(short needle, about one inch or less)**.. ☐
b. pine **(long needle, finger-length)** ..... ☐
c. other ..... ☐
d. don't know/not sure ..... ☐

2b. Which species would you prefer: spruce, fir, or pine?

a. spruce/fir ..... ☐
b. pine ..... ☐
c. no preference ..... ☐

*2c. What is the **single** <u>most</u> <u>important</u> <u>reason</u> why you obtained a natural tree?*
(RECORD VERBATIM - IF OTHER REASONS ARE STATED, RECORD THEM ALSO)

[CHECK APPROPRIATE CATEGORY BELOW BUT DO <u>NOT</u> READ ALTERNATIVES TO RESPONDENT]

a. color ..... ☐
b. smell/fragrance ..... ☐
c. good appearance ..... ☐
d. good quality ..... ☐
e. price/cost ..... ☐
f. family tradition ..... ☐
g. dislike artificial ..... ☐
h. like real/natural ..... ☐
i. convenience ..... ☐
j. Christmas spirit ..... ☐
k. other ..... ☐
l. don't know ..... ☐

2d. *Approximately how many days before Christmas Day do you cut or purchase your natural tree?*

_____ day(s)

2e. *I would like to know how important the following characteristics are to you when choosing a natural Christmas tree. On a scale of 1 to 10, where 1 is* ***not at all important and 10 is very important****, how would you rate:*

	Not Important 1	2	3	4	Neither 5	6	7	8	9	Very Important 10
a. color of tree	—	—	—	—	—	—	—	—	—	—
b. freshness	—	—	—	—	—	—	—	—	—	—
c. fullness/density	—	—	—	—	—	—	—	—	—	—
d. height	—	—	—	—	—	—	—	—	—	—
e. type of tree/species	—	—	—	—	—	—	—	—	—	—

2f. *Which of the following disposal methods did you use last Christmas?*

a. regular garbage pickup .... ☐
b. special garbage pickup .... ☐
c. collection point or dump .. ☐
d. used for firewood ..... ☐
e. other _____
f. don't know ..... ☐

2g. *Did you cut or purchase your real Christmas tree(s) last year?*

a. cut ..... ☐ **(GO TO Q. 3a)**
b. purchased ..... ☐ **(GO TO Q. 4a)**
c. both ..... ☐ **(GO TO Q. 3a)**

[COMPLETE Q.3 ONLY IF A CHRISTMAS TREE WAS CUT LAST CHRISTMAS - SEE Q2f]

3. CUT (REAL/NATURAL)

3a. *Who cut real trees for your household last year? Was it the:*

a. male head of household ..... ☐
b. female head of household ..... ☐
c. both (male and female) ..... ☐
d. member(s) of your household ..... ☐
e. whole family ..... ☐
f. other (e.g. friend/relative) ..... ☐
(please specify) _____

3b. *How many trees were cut for your household last Christmas?* _____

3c. *Approximately how far from your home did you travel to cut your tree(s)? [**IF UNABLE TO ANSWER, ASK:** What is the name of the closest town or landmark to where you cut your tree(s)?]*

Kilometres/miles traveled (or town/landmark) _____

3d. *How tall (was/were) your Christmas tree(s) last year?*

a. 1st: ____ feet

b. 2nd: ____ feet

c. 3rd: ____ feet

3e. *Why do you **cut** trees rather than **purchase** them? **(RECORD VERBATIM)***

_____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. price/cost ..... ☐
b. family tradition ..... ☐
c. family outing ..... ☐
d. enjoy cutting/outdoors ... ☐
e. convenience ..... ☐
f. freshness ..... ☐
g. poor selection to buy .... ☐
h. Christmas spirit ..... ☐
i. other ..... ☐
j. don't know/no reason ..... ☐

[COMPLETE Q.4 ONLY IF A NATURAL TREE WAS PURCHASED LAST CHRISTMAS - SEE Q2f]

4. PURCHASE (REAL/NATURAL)

4a. *Who purchased real Christmas trees for your household last Christmas? Was it the:*

a. male head of household ..... ☐
b. female head of household ..... ☐
c. both (male and female) ..... ☐
d. member(s) of your household ..... ☐
e. whole family ..... ☐
f. other (e.g. friend/relative) ..... ☐

(please specify) _____

4b. *How many natural trees did you purchase for your home last year?* _____

4c. *Why do you purchase natural trees as opposed to cutting them yourself? **(RECORD VERBATIM)***

_____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. convenience ..... ☐
b. easier to find what you want ..... ☐
c. inaccessibility to wooded areas .... ☐
d. other ..... ☐

4d. *How tall (was/were) your Christmas tree(s) last year?*

a. 1st: ____ feet

b. 2nd: ____ feet

c. 3rd: ____ feet

4e. *Where did you purchase your tree(s)?* _____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. a commercial operator (temporary lot) ..... ☐

b. a church, club or school ..... ☐

c. a retail store ..... ☐

d. a garden centre or nursery ..... ☐

e. or another (please specify) _____

f. don't know ..... ☐

4f. *Approximately **how much** did you pay for your real tree(s) last year? Did you pay (**IF 2 OR MORE TREES WERE BOUGHT, PLACE NUMBER IN BRACKETS**):*

a. less than $10 ..... ☐ ( )

b. between $10 and $14 ..... ☐ ( )

c. between $15 and $19 ..... ☐ ( )

d. between $20 and $25 ..... ☐ ( )

e. greater than $25 ..... ☐ ( )

f. don't know ..... ☐

4g. *Would you consider the price you paid for your real tree(s) to have been:*

a. very reasonable ..... ☐

b. reasonable ..... ☐

c. fair ..... ☐

d. unreasonable ..... ☐

e. very unreasonable ..... ☐

f. don't know ..... ☐

4h. *Given that you paid between $ _____ **(REFER TO Q. 4f)** for your tree(s) last year, **how much more** would you be willing to pay for an ideal tree the same size? Would you pay:*

a. nothing more ..... ☐

b. no more than $5 ..... ☐

c. between $5 and $10 ..... ☐

d. between $10 and $15 .... ☐

e. greater than $15 ..... ☐

f. don't know ..... ☐

[COMPLETE Q.5 ONLY IF AN ARTIFICIAL TREE WAS USED LAST CHRISTMAS - SEE Q1aa]

OTHERWISE GO TO QUESTIONS 6 AND 7

5. ARTIFICIAL (PURCHASED)

5a. *Excluding artificial trees less than 3 feet tall, how many floor size (i.e. >= 6 ft) artificial trees did you have in your home last year?* _____

5b. *How tall (is/are) your artificial tree(s)?* ____ *feet*

5c. *Approximately how many years have you owned an artificial Christmas tree?*

a. 1 year ..... ☐
b. 2 to 5 years ..... ☐
c. 6 to 10 years ..... ☐
d. 10 years or greater .... ☐

5d. *Do you use artificial trees every Christmas?*

a. yes ..... ☐ (GO TO Q. 5e)
b. no ..... ☐ (GO TO Q. 5da)
c. don't know/not sure .... ☐ (GO TO Q. 5e)

5da. *Do you use real trees some years?*

a. yes ..... ☐ (GO TO Q. 5db)
b. no ..... ☐ (GO TO Q. 5e)

5db. *Why did you switch to real trees some years? (RECORD VERBATIM)*

_____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. like to alternate ..... ☐
b. convenience at time ..... ☐
c. to use in another room .. ☐
d. smell ..... ☐
e. no reason ..... ☐
f. other ..... ☐

5e. *Approximately what price did you pay for your artificial tree(s)? Did you pay:*

a. nothing (received as a gift) ..... ☐ (GO TO Q. 5g)
b. less than $50 ..... ☐
c. $50 to $99 ..... ☐
d. $100 to $199 ..... ☐
e. $200 or more ..... ☐
f. don't know/not sure ..... ☐

5f. *Would you consider the price you paid for your artificial tree(s) to have been:*

- a. very reasonable ..... ☐
- b. reasonable ..... ☐
- c. fair ..... ☐
- d. unreasonable ..... ☐
- e. very unreasonable ..... ☐
- f. don't know ..... ☐

5g. *Approximately how often do you have to replace artificial trees?*

- a. have only bought one .... ☐
- b. less than 3 years ..... ☐
- c. every 3 to 5 years ..... ☐
- d. every 5 to 10 years ..... ☐
- e. more than 10 years ..... ☐
- f. don't know/can't remember ... ☐

5h. *Do you consider it a lifetime purchase?*

- a. yes ..... ☐
- b. no ..... ☐
- c. don't know ..... ☐
- d. maybe ..... ☐

5i. *What is the single most important reason why you bought an artificial tree?*
(RECORD VERBATIM - IF OTHER REASONS ARE STATED, RECORD THEM ALSO)

_____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

- a. fire prevention/safety ..... ☐
- b. age/health reasons ..... ☐
- c. good appearance ..... ☐
- d. live in apartment ..... ☐
- e. price/cost ..... ☐
- f. convenience/lack of search time .. ☐
- g. something different ..... ☐
- h. allergy to natural trees .. ☐
- i. dislike natural trees ..... ☐
- j. neat/tidiness ..... ☐
- k. other ..... ☐
- l. don't know ..... ☐

[COMPLETE QUESTIONS 6 AND 7]

6. CHARACTERISTICS OF THE MAIN INDOOR TREE

6a. *When searching for the ideal tree, what height do you prefer?* _____ *feet*

6b. *What degree of fullness or bushiness would you prefer in a tree: low, medium, or high?*

- a. low ..... ☐
- b. medium ..... ☐
- c. high ..... ☐

6c. *Where in a room do you put your tree: in the corner of a room, the center of a room, against a wall, or by a window?*

a. corner of room ..... ☐ c. against one wall ..... ☐
b. center of room ..... ☐ d. by a window ..... ☐

6d. *What do you expect to do next Christmas regarding Christmas trees? Do you plan to:*

a. purchase a natural tree ..... ☐ d. use same artificial tree .. ☐
b. cut a natural tree ..... ☐ e. or have no trees ..... ☐
c. purchase an artificial tree . ☐ f. don't know/not sure ..... ☐

7. ATTITUDE AND BELIEF MEASUREMENT

7a. *I would like to know your level of satisfaction with the following characteristics of* ***LOCALLY CUT TREES****. On a scale of 10, where 1 is very unsatisfied and 10 is very satisfied, how satisfied are you with:*

	Very Unsatisfied 1	2	3	4	Neither 5	6	7	8	9	Very Satisfied 10
a. quality of local trees	___	___	___	___	___	___	___	___	___	___
b. variety/selection	___	___	___	___	___	___	___	___	___	___
c. fullness/density	___	___	___	___	___	___	___	___	___	___
d. color/appearance	___	___	___	___	___	___	___	___	___	___
e. height	___	___	___	___	___	___	___	___	___	___
f. time spent locating tree (how far, # lots visited)	___	___	___	___	___	___	___	___	___	___

7b. *Do you feel that too many trees are cut each year by individuals and Christmas tree vendors?*

a. yes ..... ☐ (GO TO Q. 7ba)
b. no ..... ☐ (GO TO Q. 7c)
c. don't know ..... ☐

7ba. *In your opinion, what could be done to decrease such wastage?*

_____

(CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT)

a. decrease # cutting permits . ☐ e. use/buy artificial trees..... ☐
b. place restrictions/monitor . ☐ f. cultivated tree farms ..... ☐
c. place orders for trees ..... ☐ g. other ..... ☐
d. educate vendors ..... ☐ h. don't know ..... ☐

*7c. Would you be willing to purchase locally grown **cultivated** (i.e. pruned and sheared) Christmas trees if they became available at a competitive price?*

a. yes ..... ☐ c. maybe ..... ☐
b. no ..... ☐ d. don't know ..... ☐

[COMPLETE Q.8 ONLY IF NO TREE WAS USED LAST CHRISTMAS - SEE Q1a]
OTHERWISE GO TO QUESTION 9

8. NO TREE

8a. Can you tell us why you did not have a Christmas tree last year?

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. away for the holidays ..... ☐
b. too much trouble ..... ☐
c. too expensive ..... ☐
d. illness, age, death in family .. ☐
e. household too small ..... ☐
f. no children ..... ☐
g. children all grown up ... ☐
h. religious reasons ..... ☐
i. other ..... ☐
(please specify) _____
_____

8b. Have you had Christmas trees in past years?

a. yes ..... ☐ **(GO TO Q. 8ba)**
b. no ..... ☐ **(GO TO Q. 8c)**

8ba. How often:

a. always ..... ☐
b. often ..... ☐
c. sometimes ..... ☐
d. once ..... ☐

8c. Are you planning on having a Christmas tree in the future?

a. yes ..... ☐ **(GO TO Q. 8ca)**
b. no ..... ☐
c. don't know/not sure ... ☐

8ca. Would it be:

a. natural ..... ☐
b. artificial ..... ☐
c. or both ..... ☐
d. don't know/not sure ..... ☐

9. DEMOGRAPHICS

9a. ***[DO NOT ASK THIS QUESTION - RECORD THE SEX OF THE RESPONDENT]***

a. male ..... ☐
b. female ..... ☐

9b. Are you:

a. single ..... ☐
b. married ..... ☐
c. widowed ..... ☐
d. divorced ..... ☐
e. or separated .... ☐

9c. How many children aged 18 or younger live in your home? ____

a. none (adults only) ..... ☐ **(GO TO Q. 9d)**
b. one child ..... ☐
c. two children ..... ☐
d. three or more children .... ☐

9ca. How old is the youngest child in your household? ____ *years*

9d. Which of the following best describes the kind of house you live in?

a. single detached house (one or two-story, bungalow) .... ☐
b. duplex or townhouse ..... ☐
c. apartment ..... ☐
d. mobile home ..... ☐
e. other (please specify) _____

9e. In which age bracket should I place you?

a. 18 to 25 years ..... ☐
b. 25 to 29 ..... ☐
c. 30 to 34 ..... ☐
d. 35 to 44 ..... ☐
e. 45 to 54 ..... ☐
f. 55 to 64 ..... ☐
g. 65 and older ..... ☐

9f. Are you employed outside the home?

a. yes ..... ☐ **(GO TO Q. 9fb)**
b. no ..... ☐ **(GO TO Q. 9fa)**

9fa. Do you attend school full-time or part-time?

a. full-time ..... ☐
b. part-time ..... ☐
c. no ..... ☐

9fb. What is your occupation? _____

[CHECK APPROPRIATE CATEGORY BELOW BUT DO NOT READ ALTERNATIVES TO RESPONDENT]

a. professional (medicine, law). ☐
b. managerial, executive ..... ☐
c. administrative, clerical .... ☐
d. engineering, technical ..... ☐
e. marketing, sales ..... ☐
f. skilled craft or trade ..... ☐
g. semiskilled occupation ..... ☐
h. self-employed ..... ☐
i. health care/nursing ..... ☐
j. teacher ..... ☐
k. social worker ..... ☐
l. homemaker ..... ☐
m. retired ..... ☐
n. student ..... ☐
o. unemployed ..... ☐
p. other ..... ☐

9g. *In which of the following income categories should I place your family? Is your* ***total annual family income*** *(i.e. income before taxes):*

a. less than $15,000 ..... ☐
b. $15,000 to $29,000 ..... ☐
c. $30,000 to $44,000 ..... ☐
d. $45,000 to $60,000 ..... ☐
e. more than $60,000 ..... ☐

WELL, THAT WAS THE LAST QUESTION IN OUR SURVEY. THANK YOU VERY MUCH FOR YOUR PATIENCE AND CO-OPERATION. GOOD NIGHT!

APPENDIX B

Table B Summary of telephone exchanges used and omitted in Christmas tree study

Description	Municipality	Telephone Exchange(s)
Used	St. John's	364, 368, 576, 579, 722, 726, 738, 739, 745, 747, 753, 754, 781, 782
Omitted	Bell Island	488
	Long Pond	744, 781, 834
	Portugal Cove	773, 895
	Pouch Cove	335
	Torbay	437
	Witless Bay	334
	Institutions	737, 772

APPENDIX C

Table C Summary of telephone calls of Christmas tree market, June 12-20, 1990

Description	Number of Calls
No Answer	146
Busy	50
Disconnected Line	40
Call Back	34
Uncooperative	111
Incomplete Interview	13
Completed Questionnaires	403
TOTAL CALLS MADE	**797**

Computation of Response Rate[1]:

Response Rate = Completed Questionnaires/ Number of Responding Households

= 403 / 403 + 111 + 13

= 403 / 527

= 76 percent

1 Call back responses were not calculated in the response rate because respondents neither declined the interview nor provided an incomplete questionnaire. Interviewers were unable to contact these respondents prior to the conclusion of the telephone interviewing process.